


## **SPEECH DURATION PROCESSING METHOD AND APPARATUS FOR CHINESE TEXT-TO SPEECH SYSTEM**

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The duration of speech varies according to the characteristics of pronounced speech and pronouncing habit of the speaker. In the speech duration processing method and apparatus of this invention, a large amount of natural speech was analyzed, and the following was known: Speech duration of monosyllables will vary according to factors, such as phonemes, tones, phrase construction, locations in the phrases, locations in the sentence, and front and rear connected phonemes, etc. of the syllables. Through the use of these varying factors, a "speech duration parameter storage portion" for speech duration parameters is constructed. By retrieving the speech duration parameters and combining the same with the basic speech duration of a syllable during syllable speech duration calculation, the speech duration of each monosyllable in any sentence can be accurately decided. As recognized from experimental results, a text-to-speech system using the speech duration processing apparatus of this invention can synthesize speech with natural speech duration.

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